# LTC 0620 Series DinionXF Day Night Cameras

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- ▶ 15-bit DSP Technology
- ▶ Superb sensitivity
- Mechanically switching IR filter for IR sensitivity at night
- ▶ XF-Dynamic for unsurpassed wide dynamic range
- ▶ Bilinx Communication for remote set-up and control

The LTC 0620 High Performance 1/2-inch Digital CCD Day/Night Camera ensures the highest image quality possible at any time. Depending on the available light the camera will automatically switch from color to monochrome.

A unique combination of 15-bit digital video processing that enhances sensitivity and XF-Dynamic which extends the dynamic range provides a sharper, more detailed image with outstanding accuracy in color reproduction.

All Dinion cameras are supplied ready to operate. Simply attach and focus the lens, then connect power. No tools are required for back focus and power connection. For especially challenging situations where fine tuning or special settings are required, the camera parameters can be individually set using the control buttons on the side of the camera and Onscreen Display (OSD). The camera automatically detects the lens type. The Lens Wizard ensures accurate back-focusing for perfectly sharp pictures at all times.

## **Functions**

### XF-Dynamic

The highly accurate 15-bit digital signal is automatically processed to optimally capture the detail in both the high and low light areas of the scene simultaneously, maximizing the information visible in the picture.

#### **Bilinx Technology**

Bilinx is a bidirectional communication capability embedded in the video signal of all Bosch Dinion cameras. Technicians can check status, change camera settings and even update firmware from virtually anywhere along the video cable. Bilinx reduces service and installation time, provides for more accurate setup and adjustment, and improves overall performance. In addition, Bilinx uses the standard video cable to transmit alarm and status messages, providing superior performance without additional installation steps.

#### **Video Motion Detection**

The built-in video motion detector allows you to select up to four fully programmable areas with individual thresholds. The global scene change detector minimizes false alarms caused by sudden lighting condition changes, such as switching on or off the indoor or security lighting. When motion is detected alarms may be displayed in the video signal while the output relay can be closed in addition to alarm message transmission on Bilinx.

#### **Auto Black**

The automatic black level feature enhances contrast by compensating for reduced contrast (i.e. glare, fog, mist).

#### **Default Shutter**

The LTC 0620 features a fast, default shutter speed in sufficient lighting conditions to capture moving objects. When light levels fall and other adjustments have been exhausted, the shutter speed reverts to the standard setting to maintain sensitivity.

## **Back Light Compensation (BLC)**

Offering a fully programmable BLC area of interest, and a variable BLC level, the camera can be easily set up for even the most challenging entrance applications.

#### **Lens Wizard**

The Lens Wizard automatically detects the lens type and helps focus the lens at the maximum opening to ensure proper focus is maintained throughout the 24-hour cyle. No special tools or filters are required.

#### **Programmable Modes**

Three independent, preprogrammed operating modes support typical applications, but are fully programmable for individual situations. Switching between modes is easy via Bilinx or the external alarm input.

## Day/Night Mode

The Day/Night Mode LTC 0620 provides enhanced night viewing by increasing the IR sensitivity. The IR filter can switch from color to monochrome automatically by either sensing the illumination level or via the alarm input. The filter can be switched manually via the alarm input, through the camera menu or via the Bilinx coaxial control interface. An internal through the lens IR detector enhances the monochrome mode stability, as it prevents reverting to the color mode when IR illumination is dominant.

## SensUp

By increasing the integration time on the CCD up to 10 times, the effective sensitivity is dramatically enhanced. This is especially useful when relying only on moonlight for illumination.

#### **Certifications and approvals**

## **Electro Magnetic Compatibility**

Emission	EN55022 class B, FCC class B part 15
Immunity	EN50130-4 Alarm Systems, Part 4
Vibration	Camera with 500 g (1.1 lbs) lens according to IEC60068-2-27

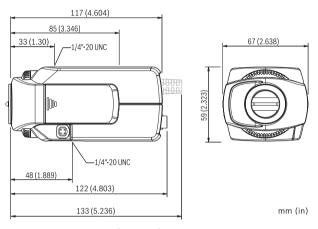
#### Safety

LTC 0620/11 and LTC 0620/51: EN60065

LTC 0620/21 and LTC 0620/61: UL6500, cUL CAN/CSA E60065-00

Region	Certification	
Europe	CE	Declaration of Conformity
USA	FCC	Declaration of Conformity

## Installation/configuration notes



Dimensions in mm (inches)

## Parts included

Quantit y	Component
1	LTC 0620 Series Dinion <sup>XF</sup> Day\Night Camera
1	C/CS – mount conversion ring
1	Spare male 4-pin lens connector
	Lens not included

#### **Technical specifications**

#### **Electrical**

Model No.	Rated Voltage	
LTC 0620/11	12-28 VAC	45-65 Hz
	11-39 VDC	
LTC 0620/21	12-28 VAC	45-65 Hz
	11-39 VDC	
LTC 0620/51	85-265 VAC	45-65 Hz
LTC 0620/61	85-265 VAC	45-65 Hz
Power Consumption	4 W	
lmager	Interline transfer C format	CCD, 1/2-inch image

Active Pixels	
PAL Model	752 H x 582 V
NTSC Model	768 H x 492 V
Sensitivity (3200 k)	
Sensitivity (full video) <sup>1)</sup>	1.4 lux (0.14 fc)
Sensitivity 50 IRE <sup>1)</sup>	0.31 lux / 0.052 lux (0.031 fc / 0.0052 fc) (Monochrome Mode)
Minimum illumination <sup>1)</sup>	0.18 lux / 0.024 lux (0.018 fc / 0.0025 fc) (Monochrome Mode)
Minimum Illumination with SensUp	0.018 lux / 0.0024 lux (0.0018 fc / 0.00024 fc) (Monochrome Mode)
Horizontal Resolution	540 TVL
Signal-to-Noise-Ratio	> 50 dB
Video Output	1 Vpp, 75 Ohm
Y/C Output	Y: 1 Vpp / C: 0.3 Vpp
Synchronization	Internal, Line Lock, HV-lock and Genlock (Burst lock) selectable
Shutter	Auto (1/60 (1/50) to 1/500000), fixed, flickerless, default
Sensitivity up	Off, automatic continuous up to 10x
Auto Black	On, off selectable
Range	32x dynamic range enhancement
Noise Reduction	Auto, off selectable
Contour	Sharpness enhancement level selectable
BLC	Off, area and level selectable
Gain	Auto (maximum level selectable to 28 dB) or fixed level selectable
Lens Mount	CS (max lens protrusion 5 mm, 0.2 in.)
White Balance	ATW (2500–10000 K), AWB hold, manual WB selectable
VMD	4 area, sensitivity selectable
Alarm Output	VMD or Bilinx
Alarm Input (TTL)	Profile switching, +5 V nominal, +40 VDC max.
Alarm Output Relay	Max. 30 VAC or +40 VDC, max. 0.5 A continuous, 10 VA
External Synchronal Input	75 Ohm or high impedance selectable
Cable Compensation	Up to 1000 m (3000 ft) coax without external amplifiers (automatic set-up in combination with coaxial communication)

Camera ID	16 character editable string, position selectable
Lens Types	Manual, DC- and Video-iris auto-detect with override
	DC-iris drive: max. 50 mA continuous
	Video iris: $11.5 \pm 0.5$ VDC, max. $50$ mA continuous
Remote Control	Bilinx coaxial communication

<sup>1)</sup> F/1.2, 89% reflection, SensUp off

## Mechanical

Dimensions (H x W x L)	$59 \times 67 \times 122 \text{ mm}$ (2.28 x 2.6 x 4.8 in.) without lens
Weight	450 g (0.99 lbs) without lens
Tripod Mount	Bottom (isolated) and top 1/4-inch 20 UNC
Controls	OSD with softkey operation

## **Environmental**

Operating Temperature	-20 °C to +50 °C (-4 °F to +122 °F)
Storage Temperature	-25 °C to +70 °C (-13 °F to +158 °F)
Operating Humidity	20% to 93% Relative humidity
Storage Humidity	Up to 98% Relative humidity

## Ordering information

## LTC 0620/11 DinionXF Day Night Camera

1/2-inch, high performance, 540 TVL, PAL, DSP, 12 – 28 VAC/11 – 39 VDC, 50 Hz Order number **LTC0620/11** 

## LTC 0620/21 DinionXF Day Night Camera

1/2-inch, high performance, 540 TVL, NTSC, DSP, 12-28 VAC/11-39 VDC, 60 Hz Order number LTC0620/21

## LTC 0620/51 DinionXF Day Night Camera

1/2-inch, high performance, 540 TVL, PAL, DSP, 85 – 265 VAC, 50 Hz

Order number LTC0620/51

## LTC 0620/61 DinionXF Day Night Camera

1/2-inch, high performance, 540 TVL, NTSC, DSP, 85 – 265 VAC, 60 Hz

Order number LTC0620/61

## LTC 3764/20 Varifocal Lens IR corrected

1/2-inch, 4-12 mm, DC-iris, C-mount, F1.2-360, 4-pin Order number LTC3764/20

## LTC 3774/30 Varifocal Lens IR corrected

1/2-inch, 10 – 40 mm, DC-iris, C-mount, F1.4-360, 4-pin

Order number LTC3774/30

#### LTC 3783/50 Zoom Lens IR corrected

1/2-inch, 8.5 - 85 mm, Video-iris, C-mount F1.6-360, 4-

Order number LTC3783/50

## LTC 3793/50 Zoom Lens IR corrected

1/2-inch, 8 - 144 mm, Video-iris, C-mount, F1.6-360, 4pin

Order number LTC3793/50

#### **TC120PS Power Supply Unit**

110-120 VAC/15 VDC, 50/60 Hz, 300 mA Order number TC120PS

### **TC220PS Power Supply Unit**

230 VAC/12 VDC, 50 Hz, 10 VA Order number TC220PS

#### TC220PSX-24 Power Supply Unit

230 VAC/20 VAC, 50 Hz, 20 VA Order number TC220PSX-24

## **TC1334 Power Supply Unit**

120 VAC/24 VAC, 60 Hz, 30 VA Order number TC1334

#### **Software Options**

## **VP-CFGSFT Configuration Software**

for cameras using Bilinx, includes VP-USB Adaptor Order number VP-CFGSFT

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